

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Judson S. Marte et al.

: Group Art Unit:

Serial No.:

: Examiner:

Filed:

:

For: PERMANENT MAGNET ALLOY FOR  
MEDICAL IMAGING SYSTEM AND  
METHOD OF MAKING

## INFORMATION DISCLOSURE STATEMENT

- ☒ 1 **Pursuant to 37 CFR 1.97 (b)**  
[within 3 months of national, non-CPA filing or prior to 1<sup>st</sup> Office Action] *no charge*
- ☐ 2 **Certification Pursuant to 37 CFR 1.97(c)(1)**  
[before Final Office Action, Allowance, or other action closing prosecution] *no charge*
- ☐ 3 **Fee Payment Pursuant to 37 CFR 1.97(c)(2)**  
[before Final Office Action, Allowance, or other action closing prosecution] *\$180.00*
- ☐ 4 **Certification & Fee Payment Pursuant to 37 CFR 1.97(d)**  
[On or before issue fee payment] *\$180.00*

ATTN: BOX PATENT APPLICATION

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

The following are submitted in the above identified application in compliance with 37 CFR 1.97 and 37 CFR 1.98:

- ☒ 5 A list of documents on form PTO-1449 or Substitute together with copies of each identified document and a translation thereof or a concise explanation of each non-English language document or a Search Report from an International Searching Authority for a patent application filed via the Patent Cooperation Treaty or document(s) cited in the application or the priority application.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated below.

Date of Deposit

Type or Print Name

Signature

This paper is submitted in accordance with:

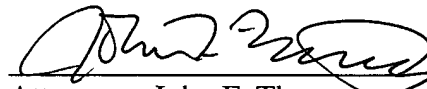
- ☒ 6 37 CFR 1.97(b): [within 3 months of national, non-CPA filing or prior to 1<sup>st</sup> Office Action]
- ☐ 7 37 CFR 1.97(c): [before Final Office Action, Allowance, or other action closing prosecution, whichever is earlier]; and
- ☐ 8 The required Certification made in item 11 below; or
- ☐ 9 The \$180.00 fee specified in 37 CFR §1.17(p) for submission of this Information Disclosure Statement is authorized in item 15 below.
- ☐ 10 37 CFR 1.97(d): [on or before issue fee payment]; and
- a) The required Certification is stated in item 11 below; and
- b) The \$180.00 fee specified in 37 CFR §1.17(p) for submission of this Information Disclosure Statement is authorized in item 14 below.
- ☐ 11 Certification
- ☐ 12 Each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; or
- ☐ 13 No item contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this document after making reasonable inquiry, no item of information contained in this Statement was known to any individual designated in 37 CFR §1.56(c) more than three (3) months prior to the filing date of this Statement.
- ☒ 14 Payment of all applicable fees:
- ☒ 15 Please charge all applicable fees associated with the submittal of this Information Disclosure Statement to Deposit Account No. 07-0868.

An original and two (2) copies of this document are enclosed.

Respectfully submitted,

September 16, 2003

Date



Attorney – John F. Thompson

Registration No. 43,953

Phone: (518) 387-6275

or (518) 387-7122

**General Electric Company**  
**Patent Docket Rm 4A59**  
**P.O. Box 8, Bldg. K-1 – Ross**  
**Schenectady, New York 12301**  
**Customer Number: 006147**

FORM PTO-1449  
(REV. 7-80)  
(Title Amended 3/83)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

133736

SERIAL NO.

Applicant

Marte et al.

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Group

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT--

LIST OF ITEMS

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5	6	8	0	0	8	6	10/21/97	Allis		
	AB	5	6	3	1	6	1	6	05/20/97	Ohta		
	AC	5	2	8	3	5	4	4	02/01/94	Sakurai		
	AD	4	8	1	8	9	6	6	04/04/89	Miyamoto		
	AE	5	3	1	7	2	9	7	05/31/94	Kaufman		
	AF	4	5	4	0	4	5	3	09/10/85	Boredelon		
	AG	5	3	8	3	9	7	8	01/24/95	Yamamoto		
	AH	4	4	9	6	3	9	5	01/29/85	Croat		
	AI	6	1	2	0	6	2	0	09/19/00	Benz		
	AJ	6	1	5	7	2	8	1	12/05/00	Katznelson		
	AK	6	1	6	3	2	4	0	12/19/00	Zuk		

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	No
	AL	0	3	1	7	0	6	4	3	JAPAN				
	AM	0	2	1	4	1	5	0	1	JAPAN				
	AN			6	2	3	9	3	9	11/09/94	EUROPEAN PATENT APPL.			
	AO	1	0	1	7	4	6	8	1	JAPAN				
	AP		0	0	4	8	2	0	8	08/17/00	PCT APPLICATION			

## OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

	AR	Abstract of Japan 2002-536,842
	AS	"Electrical Engineering Concepts and Applications," A. Bruce Carlson et al., Addison-Wesley Publishing Co., 1990, pp. 119-121.
	AT	"Magnetic Materials and Their Properties," E.A. Brandes et al., Smithells Metal Reference Book, Butterworth-Heinemann Ltd., 1992, p. 20-6.

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	BA	4	8	2	7	2	3	5	05/02/89	Inomata			
	BB	6	5	1	8	8	6	7	02/11/03	Laskaris			
	BC	6	5	2	5	6	3	4	02/25/03	Laskaris			
	BD	6	2	5	9	2	5	2	07/10/01	Laskaris			
	BE	6	2	5	5	6	7	0	07/03/01	Srivastava			
	BF	6	4	2	9	7	6	1	08/06/02	Laskaris			
	BG	3	8	9	9	7	6	2	08/12/75	Studders			
	BH	5	3	4	3	1	8	0	08/30/94	Fukumoto			
	BI	5	2	5	2	9	2	4	10/12/93	Sakurai			
	BJ	2002/0021129								02/21/02	Laskaris		
	BK	4	5	8	8	4	3	9	05/13/86	Narasimhan			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER								DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
														YES	No
	BL														
	BM														
	BN														
	BO														
	BP														

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

	BR	"Permanent Magnet Assembly and Method of Making Thereof," Laskaris et al., Serial No. 10/309,146 (GE docket RD-28500-4), filed 12/04/02.
	BS	"Permanent Magnet Assembly and Method of Making Thereof," Laskaris et al., Serial No. 10/309,139 (GE docket RD-28500-5), filed 12/04/02.
	BT	"On the Oxygen Stabilized Nd-rich Phase in the Nd-Fe-B(-O) Permanent Magnet System," D. Lemarchand, P. Vigler, B. Labulle, IEEE Trans. Magnetics, Vol. 26, No. 5, 1990, pp. 2649-51.

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	CA 4 6 0 1 8 7 6	07/22/86	Yamashita			
	CB 4 6 6 8 2 8 3	05/26/87	Honda			
	CC 4 7 4 6 3 7 8	05/24/88	Wysiekierski			
	CD 4 7 6 9 0 6 3	09/06/88	Ishigaki			
	CE 4 7 7 0 7 0 2	09/13/88	Ishigaki			
	CF 4 7 7 0 7 2 3	09/13/88	Sagawa			
	CG 4 7 9 2 3 6 8	10/20/88	Sagawa			
	CH 4 7 9 3 8 7 4	10/27/88	Mizoguchi			
	CI 4 8 7 3 6 0 5	10/10/89	Drits			
	CJ 4 8 7 8 9 6 4	11/07/89	Mizoguchi			
	CK 4 8 9 8 6 1 3	02/06/90	Ishigaki			

### FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	No
	CL						
	CM						
	CN						
	CO						
	CP						

### OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

CR	"The Effects of Average Grain Size on the Magnetic Properties and Corrosion Resistance of NdFeB Sintered Magnets," D.W. Scott et al., Journal of Applied Physics, 79 (8), 15 April, 1996, pp. 5501-5503.
CS	"Effect of Oxygen, Carbon, and Nitrogen Contents on the Corrosion Resistance of Nd-Fe-B Magnets," A.S. Kim et al., IEEE Trans. on Magnetism, Vol. 26, No. 5, September 1990, pp. 1936-1938.
CT	"Stability of Nd-Fe-B Powders Obtained by Hydrogen Decrepitation," M. Verdier et al., IEEE Trans. on Magnetism, Vol. 30 No. 2, March 1994, pp. 657-659.

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U.S. PATENT DOCUMENTS

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	DA 4 8 9 8 6 2 5	02/06/90	Otsuka			
	DB 4 9 0 2 3 5 7	02/20/90	Imaizumi			
	DC 4 9 3 5 0 7 5	06/19/90	Mizoguchi			
	DD 4 9 5 2 2 5 1	08/28/90	Iwasaki			
	DE 4 9 7 8 3 9 8	12/18/90	Iwasaki			
	DF 5 0 1 1 5 5 2	04/30/91	Otsuka			
	DG 5 0 7 1 4 9 3	12/10/91	Mizoguchi			
	DH 5 0 9 8 4 8 6	03/24/92	Iwasaki			
	DI 5 1 2 5 9 9 0	06/30/92	Iwasaki			
	DJ 5 1 2 9 9 6 4	07/14/92	Anderson			
	DK 5 1 4 7 4 4 7	09/15/92	Takeshita			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	No
	DL						
	DM						
	DN						
	DO						
	DP						

OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

	DR	"A Nd-Fe-O Intergranular Phase in Nd-Fe-B Sintered Magnets and Its Effect on Coercivity," Z. Chen et al., IEEE Trans. on Magnetics, Vol. 31 No. 3, May 1995, pp. 2215-2219.
	DS	"The Role of Oxygen for Improving Magnetic Properties and Thermal Stability of Sintered (Nd,Dy)(Fe,Co)B Magnets," IEEE Trans. on Magnetics, Vol. 31 No. 6, November 1995, pp. 3656-3658.
	DT	"On the Grain-Boundary Phase in Iron Rare-Earth Boron Magnets," R. Ramesh et al., Journal of Applied Physics 61 (8), 15 April, 1987, pp. 2993-2998.

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	EA	5	1	6	2	0	6	4	11/10/92	Kim			
	EB	5	1	9	4	0	9	9	03/16/93	Esper			
	EC	5	2	1	7	5	4	1	06/08/93	Chin			
	ED	5	2	1	7	5	4	3	06/08/93	Inokoshi			
	EE	5	2	2	5	0	0	4	07/06/93	O'Handley			
	EF	5	2	8	1	2	5	0	01/25/94	Hamamura			
	EG	5	2	8	2	9	0	4	02/01/94	Kim			
	EH	5	2	8	6	3	0	7	02/15/94	Anderson			
	EI	5	3	5	2	3	0	1	10/04/94	Panchanathan			
	EJ	5	4	2	7	7	3	4	06/27/95	Yamashita			
	EK	5	4	3	1	7	4	7	07/11/95	Takebuchi			

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER								DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
														YES	No
	EL														
	EM														
	EN														
	EO														
	EP														

## OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

	ER	"Oxidation of Fe-R-B Powders During Preparation of Permanent Magnets," C.N. Christodoulou et al., Journal of Applied Physics 61 (8), 15 April, 1987, pp. 3760-3762.
	ES	"Effect of Oxygen on Magnetic Properties of Nd-Fe-B Magnets," A.S. Kim, Journal of Applied Physics 64 (10), 15 November 1988, pp. 5571-5573.
	ET	"Replacement of Nd by an Intermetallic Phase in the Intergranular Region of Fe-Nd-B Sintered Magnets," B. Grieb et al., Journal of Applied Physics 70 (10), 15 November 1991, pp. 6354-6356.

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	FA	5	4	7	8	4	1	1	12/26/95	Coey			
	FB	5	4	8	0	4	7	1	01/02/96	Kim			
	FC	5	4	8	1	0	8	4	01/02/96	Patrick			
	FD	5	4	8	2	5	7	5	01/09/96	Barzasi			
	FE	5	5	3	8	5	6	5	07/23/96	Akioka			
	FF	5	5	6	5	0	4	3	10/15/96	Akioka			
	FG	5	5	7	5	8	3	0	11/19/96	Yamashita			
	FH	5	5	8	9	0	0	9	12/31/96	Kim			
	FI	5	5	9	7	4	2	5	01/28/97	Akioka			
	FJ	5	6	4	8	1	6	0	07/15/97	Kishimoto			
	FK	5	6	7	4	3	2	7	10/07/97	Yamamoto			

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER								DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
														YES	No
	FL														
	FM														
	FN														
	FO														
	FP														

## OTHER INFORMATION (Including Author, Title, Date, Pertinent pages. Etc.)

	FR	"A New Stable Ferromagnetic Phase in Nd-Fe-B Magnets and its Effect on Coercivity," Z. Chan et al., Journal of Applied Physics 74 (5), 1 September 1993, pp. 3596-3598.
	FS	"High Performance Nd-Fe-B Sintered Magnets Made by the Wet Process," M. Takahashi et al., Journal of Applied Physics 83 (11), 1 June 1998, pp. 6402-6404.
	FT	

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FORM PTO-1449 (REV. 7-80)	US. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 133736	SERIAL NO.
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <u>LIST OF ITEMS</u>		Applicant Marte et al.	
		Filing Date	Group

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	GA	5,858,123	01/12/99	Uchida			
	GB	5,942,053	08/24/99	Sekine			
	GC	5,997,804	12/07/99	Uchida			
	GD	6,022,424	02/08/00	Sellers			
	GE	6,045,751	04/04/00	Buschow			
	GF	6,080,245	06/27/00	Uchida			
	GG	6,159,308	12/12/00	Uchida			
	GH	6,187,259	02/13/01	Yamashita			
	GI	6,221,123	04/24/00	Mann, Sr.			
	GJ	6,261,515	07/17/01	Ren			
	GK	6,277,211	08/21/01	Panchanathan			
	GL	6,281,774	08/28/01	Nishiuchi			
	GM	6,296,720	10/02/01	Yamamoto			
	GN	6,312,494	11/06/01	Tokoro			
	GO	6,368,551	04/09/02	Sekine			
	GP	6,413,327	07/02/02	Okajima			
	GQ	6,447,621	09/10/02	Tokoro			
	GR	6,468,365	10/22/02	Uchida			
	GS	6,475,302	11/05/02	Mei			
	GT	6,482,353	11/19/02	Kuniyoshi			
	GU	6,491,765	12/10/02	Okayama			
	GV	6,506,265	01/14/03	Yamamoto			
	GW	6,511,631	01/28/03	Kuniyoshi			
	GX	6,537,345	03/25/03	Terada			
	GY	6,537,385	03/25/03	Okayama			
	GZ	5,472,525	12/05/95	Tokunaga			

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U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	HA	2002/0000262	01/03/02	Ono			
	HB	2002/0001534	01/03/02	Kunioshi			
	HC	2002/0007875	01/24/02	Yamamoto			
	HD	2002/0020469	02/21/02	Okayama			
	HE	2002/0033205	03/21/02	Tamura			
	HF	2002/0036029	03/28/02	Kikugawa			
	HG	2002/0036031	03/28/02	Sakaki			
	HH	2002/0050306	05/02/02	Nishiuchi			
	HI	2002/0054824	05/09/02	Tokoro			
	HJ	2002/0057982	05/16/02	Kuniyoshi			
	HK	2002/0062884	05/30/02	Kaneko			
	HL	2002/0112785	08/22/02	Sekine			
	HM	2002/0117237	08/29/02	Takaki			
	HN	2002/0144754	10/10/02	Tokoro			
	HO	2003/0000600	01/02/03	Okayama			
	HP	2003/0051774	03/20/03	Saito			
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	HZ						

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